WISExplore
Data Navigation and Inquiry

WISExplore
Data-Driven School Improvement Planning

Title I Innovation and Implementation Conference II

October 28, 2014: 10:30 Session

Facilitated by WISExplore Team Members:

Judy Sargent and Mary Ann Hudziak

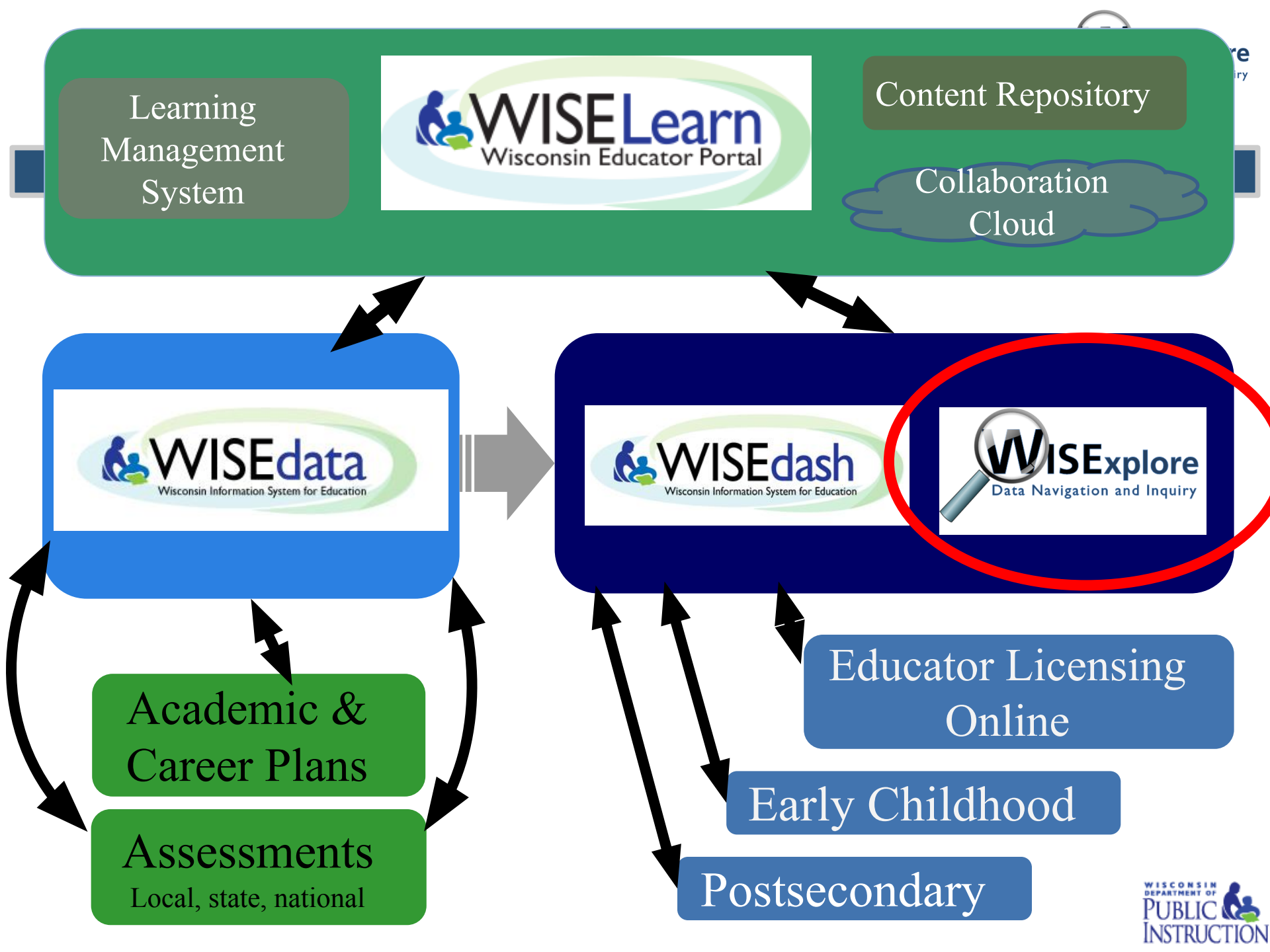
AGENDA

- About WISExplore
- Data Use Standards
- Data Inquiry Process
- Using Data Sources

Critical Skills for School Leadership Teams

WISExplore
Data Navigation and Inquiry

About WISExplore


Learning Management System
WISELearn
Wisconsin Educator Portal
Content Repository
Collaboration Cloud
WISEdata
Wisconsin Information System for Education
WISEdash
Wisconsin Information System for Education
WISExplore
Data Navigation and Inquiry
Academic & Career Plans
Assessments
Local, state, national
Educator Licensing Online
Early Childhood
Postsecondary
Wisconsin Department of Public Instruction

WISExplore

Providing professional development and coaching resources focused on data inquiry with state data sources.

Resources to assist leadership teams.

Analyzing Data for Illumination:
Data Quality Campaign

Data as a Hammer

PAST

Data are collected to satisfy compliance requirements and are often used as “hammers” to punish teachers, schools, and school districts. The data are usually available in aggregate form and flow in one direction—up.

Data as a Flashlight

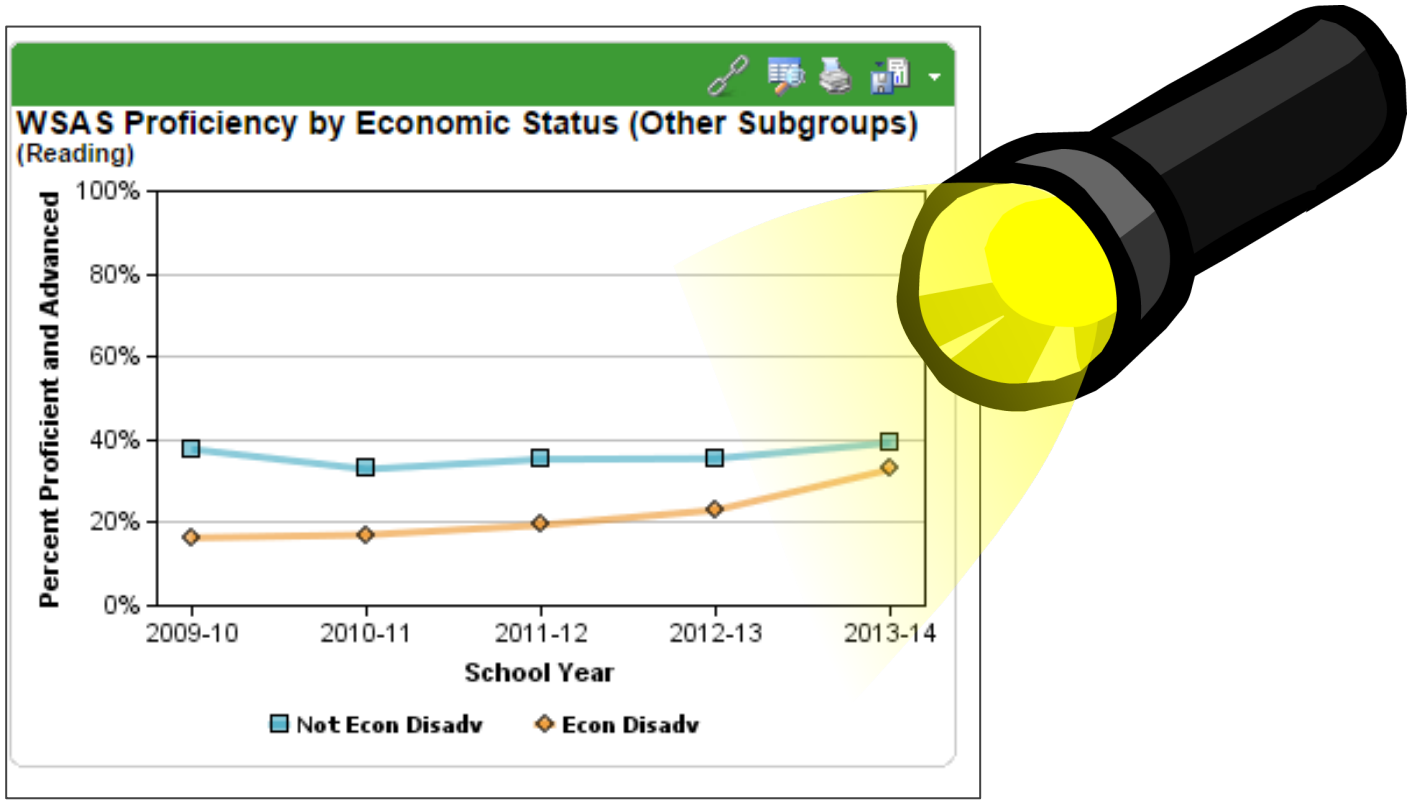
FUTURE

Data are collected and analyzed in order to answer critical questions facing all education stakeholders: everyone from parents to policymakers. Student-level data shine a light on what is working, so decisions at all levels are informed by high-quality data aimed at improving the achievement of every student.

Link to Data Quality Campaign Resources http://wise.dpi.wi.gov/wisexplore

WISExplore to Facilitate Insight

To provide WISEdash guidance in data navigation and meaningful inquiry for illumination that informs school improvement.



WISExplore Web Resources

http://wise.dpi.wi.gov/wisexplore

WISE Home | WISEdash Public Portal | Projects and Grants | Data Privacy | WISEdash for Districts | WISExplore

Secure Home, ASM, WAMS

WISExplore Homepage

WISExplore

WISEforms (LiveBinders)

WISEcoach Resources (LiveBinder)

WISExplore E-Learning Modules

WISExplore Data Retreats and Presentations
(access code: wisexplore)

WISEtools Technical Assistance

Secure Home (WISEdash for Districts)

Data Quality Campaign Resources

Who Uses Student Data? (Infographic)

Who Uses Student Data? (Video)

Ms. Bullen's Data Rich Year (Infographic)

DQC Questions Tool (Tool)

SLDS Data Use Standards Workgroup

Knowledge, Skills, and Professional Behaviors for Effective Data Use (Resource)

About the WISExplore Project

Using data effectively can be a new challenge! To address this, DPI partners with the CESA Statewide Network (CSN) to develop a common data inquiry process for teachers and school leaders statewide. This team is called WISExplore.

WISExplore partners help educators to actively discuss the data available through WISEdash portals and other sources. The partners help school staff grow internal capacity for data inquiry, and to design and implement a thoughtful school improvement action based on their analyses.

WISExplore Project Mission

The purpose of the WISExplore Project is to design, develop, pilot and disseminate a consistent data inquiry process for use by school boards, administrators and classroom educators to improve student achievement in Wisconsin.

WISExplore Partners

In addition to the Department of Public Instruction, the WISExplore Team is collaborating with key educational programs including Title I, Special Education, English Language Learning, RtI Center, and the Value Added Research Center (VARC).

Process feedback

The WISExplore Work Team is in the process of piloting and receiving feedback on the WISExplore data inquiry process. The process includes e-learning modules and valuable data inquiry methods, free to use by Wisconsin educators.

Contact the WISExplore Work Team

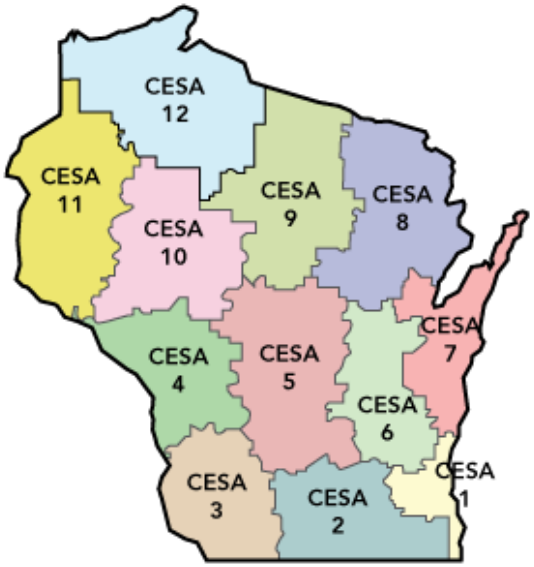
- Judy Sargent, CESA 7
- Jim Lee, CESA 12

WISExplore Professional Learning

Website: http://wise.dpi.wi.gov/wisexplore

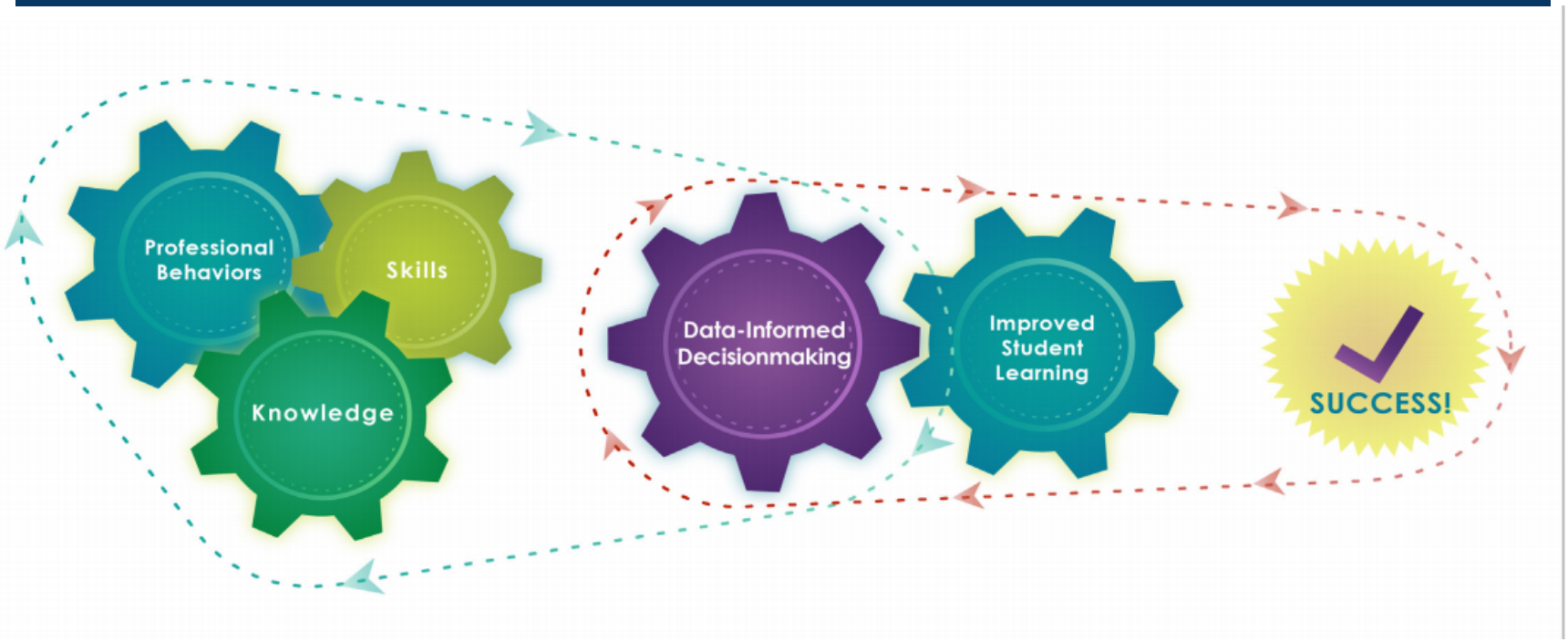
- **WISEdash eLearning Modules**
- **Data Retreat Training & Resources**
  - Data Inquiry Process & Investigations
  - Replicable processes and tools
- **Technical Assistance Training**
  - For assistance with WISEdash Secure access procedures
  - CESA "Help Desk" services
- **WISEcoaching Resources**
  - month-by-month guidance

To Develop CESA and District Capacity for statewide professional learning with data inquiry tools and processes



WISExplore
Data Navigation and Inquiry

Data Use Standards



Data Use Standards for Leadership Teams

- What is that we want students to know and do?
- **How will we know if they've learned it?**
- What will we do if they don't?

The Center FOR COMPREHENSIVE SCHOOL REFORM AND IMPROVEMENT

From Professional Learning Communities Characteristics:

Focus on examining outcomes to improve student learning (DuFour, 2004; Feger & Arruda, 2008; Kruse, Louis, & Bryk, 1994; Louis, 2006). PLCs promote results-oriented thinking that is focused on continuous improvement and student learning (Reichstetter, 2006). The focus goes beyond a team getting together to look at data. **In PLCs, teachers respond to data that require mutual accountability and changing classroom practices.** Data help motivate teachers to see what is happening and what they need to do collectively (White & McIntosh, 2007).

Effective PLCs Use a Toolbox of Data Knowledge, Skills and Concepts to Inform Practices

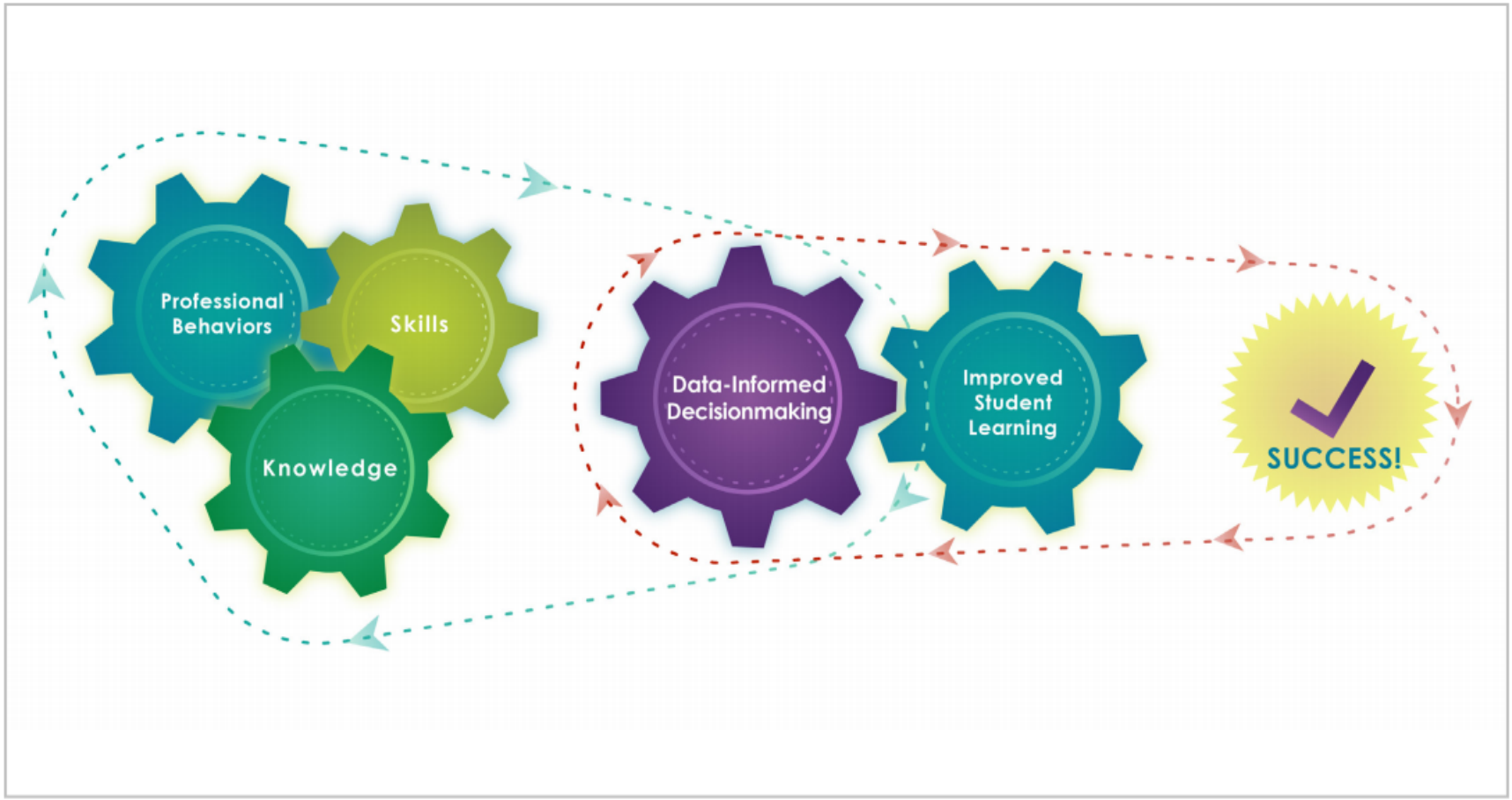
WISExplore Supports Data Use Standards

Goal: To increase the effective use of data by teachers and administrators to support student learning and success.

Recommended resource for self-assessment and team study.

Website: http://wise.dpi.wi.gov/wisexplore

Data Use Standards

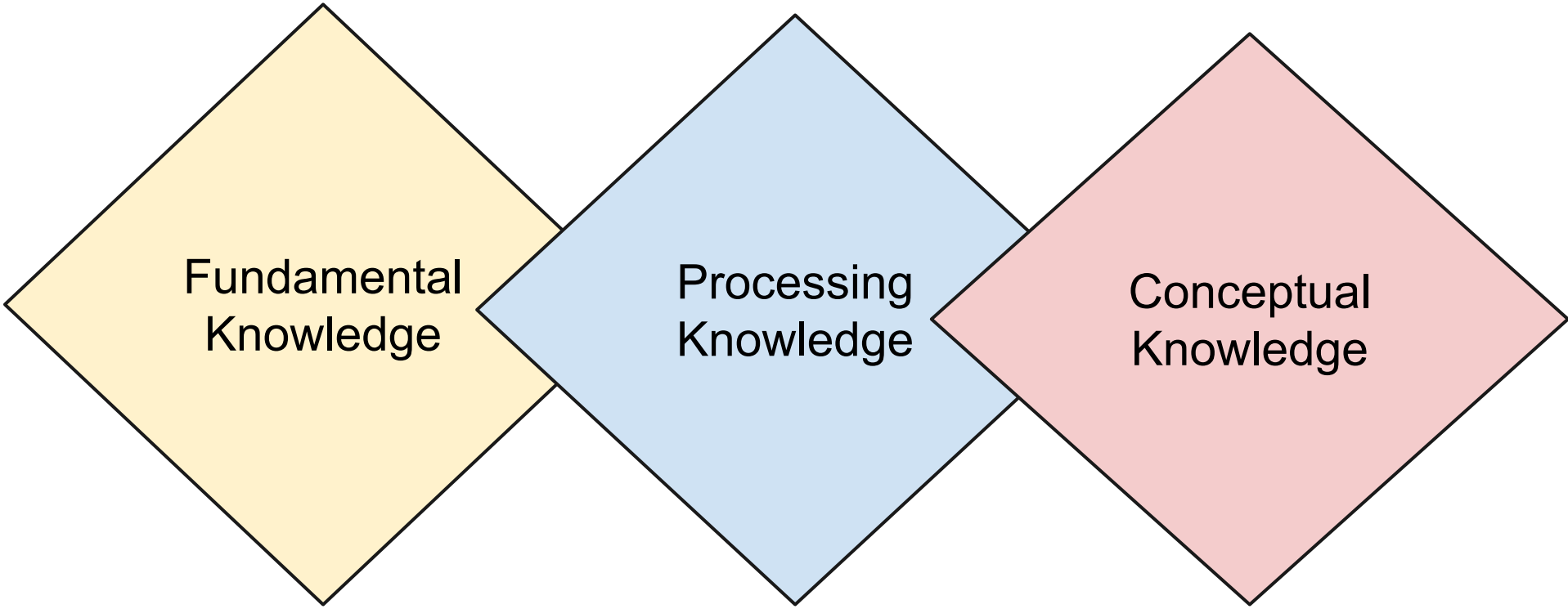


The knowledge, skills, and professional behaviors outlined in this resource help provide educators with the tools they need to make data-informed decisions to improve student learning.

Data Standards:

KNOWLEDGE

Familiarity with the nature of data and concepts underlying data use; includes the learning and theory that education communities need as a foundation for using data to improve educational outcomes.



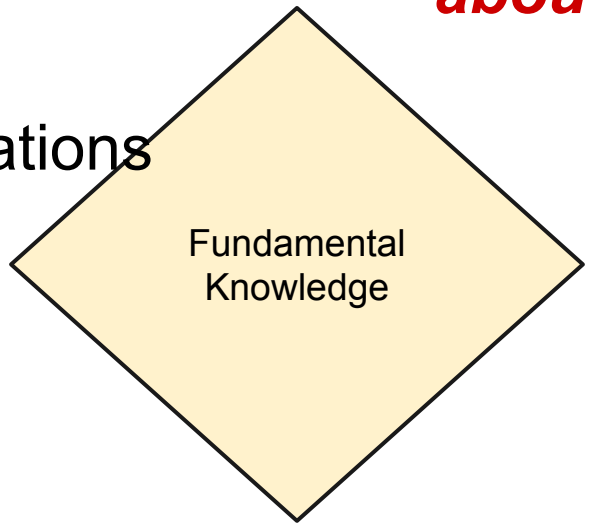
Data Standards:

KNOWLEDGE

<u>Fundamental Knowledge:</u> The basic information needed to know how to use the data

- Question Formation
- Data Quality
- Types of Data
- Types of Measures
- Data Sources
- Data Representations

How would you rate your team's individual and collective <u>fundamental</u> knowledge about data?



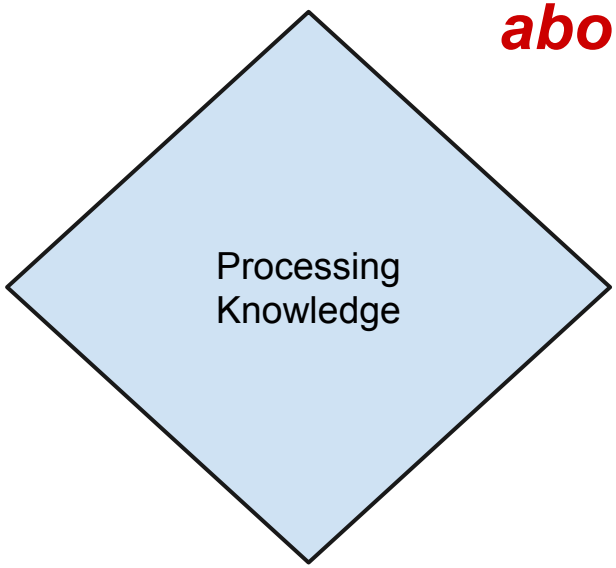
Data Standards:

KNOWLEDGE, continued

Processing Knowledge: The knowledge needed to understand actions that can be taken with data.

- Types of Analysis
- Data Analysis Tools
- Data Collection
- Data Context
- Data Format

How would you rate your team's individual and collective processing knowledge about data?

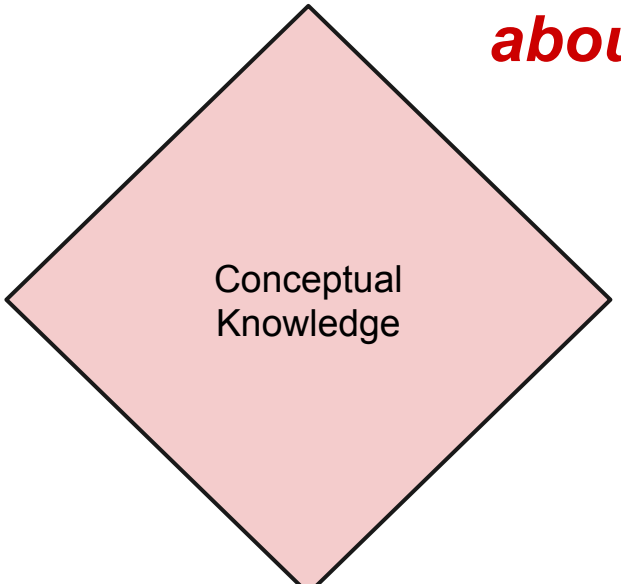


Data Standards:

KNOWLEDGE, continued

Conceptual Knowledge: The knowledge of best practices regarding data use.

- Data Assumptions
- Data Limitations
- Data Culture
- Data Privacy
- Data Ethics



How would you rate your team's individual and collective conceptual knowledge about data?

Data Standards:

KNOWLEDGE

Turn and Talk.
At first look, how would you rate your level of knowledge about data?

Fundamental Knowledge

Processing Knowledge

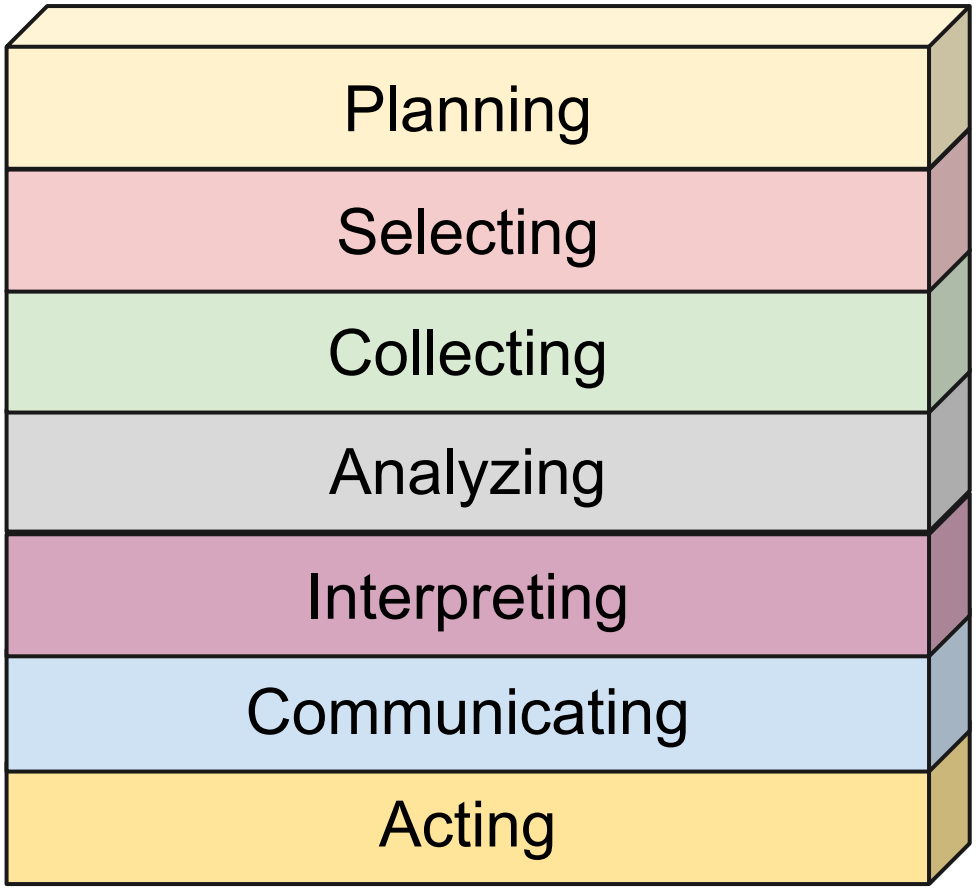
4 = Masterful Level
3 = Proficient Level
2 = Basic Level
1 = Improvement Needed

Conceptual Knowledge

Data Standards:

SKILLS

The ability to access, collect, analyze, interpret, act on, and communicate about data using appropriate tools and representations in a manner appropriate for the educator's professional role and responsibility

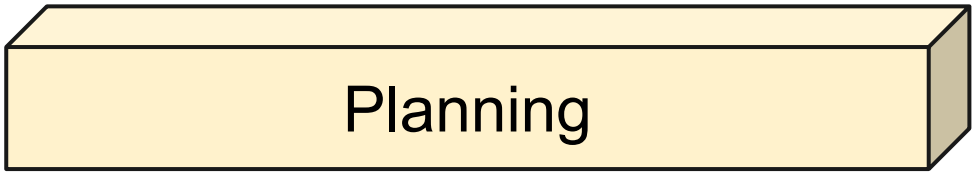


Data Standards:

SKILLS, continued

Planning for Data: Strategizes for data collection and management

- Goals & Questions
- Alignment
- Data Management
- Data Meaning



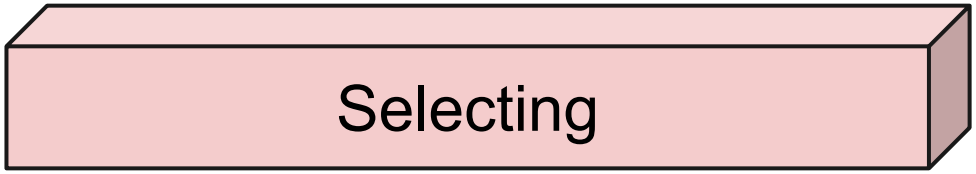
How would you rate your team's individual and collective planning skills with data?

Data Standards:

SKILLS, continued

Selecting Data: Locates, accesses, develops, and evaluates data sources.

- Data Discovery & Data Acquisition
- Critical Evaluation
- Development of Measures



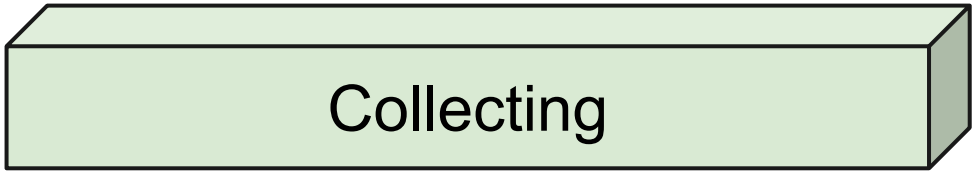
How would you rate your team's individual and collective data selecting skills?

Data Standards:

SKILLS, continued

Collecting Data: Uses appropriate technologies and methods in acquiring data

- Facilitation
- Technology
- Multiple Measures
- Modifications



How would you rate your team's individual and collective data collection skills?

Data Standards:

SKILLS, continued

Analyzing Data: Exhibits the technical skills necessary to examine data

- Formatting
- Aligned Analysis
- Considerations
- Comparisons

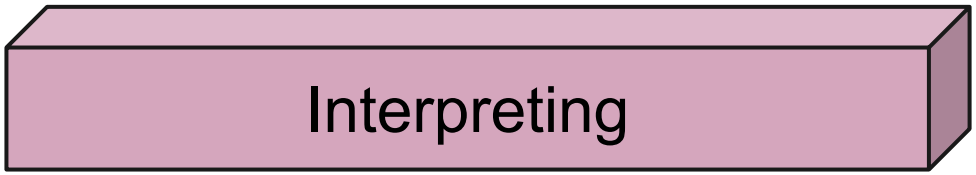
How would you rate your team's individual and collective data analysis skills?

Data Standards:

SKILLS, continued

Interpreting Data: Constructs meaning from data within a particular context

- Locating
- Representation
- Patterns
- Congruency



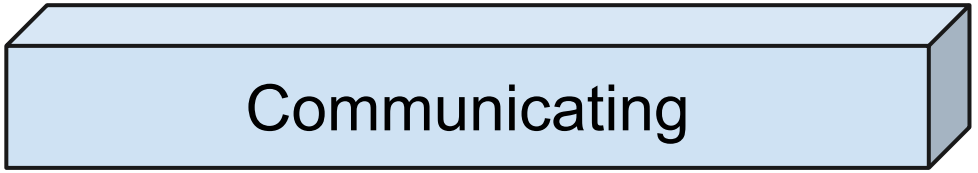
How would you rate your team's individual and collective data interpretation skills?

Data Standards:

SKILLS, continued

<u>Communicating Data:</u> Conveys information about data

- Presentation
- Explanation
- Multiple Audiences



How would you rate your team's individual and collective data <u>communicating</u> skills?

Data Standards:

SKILLS, continued

Acting from Data: Employs appropriate strategies based on findings

- Strategies
- Action Plan

How would you rate your team's individual and collective skills in acting upon data? (data-driven actions)

Data Standards:

SKILLS

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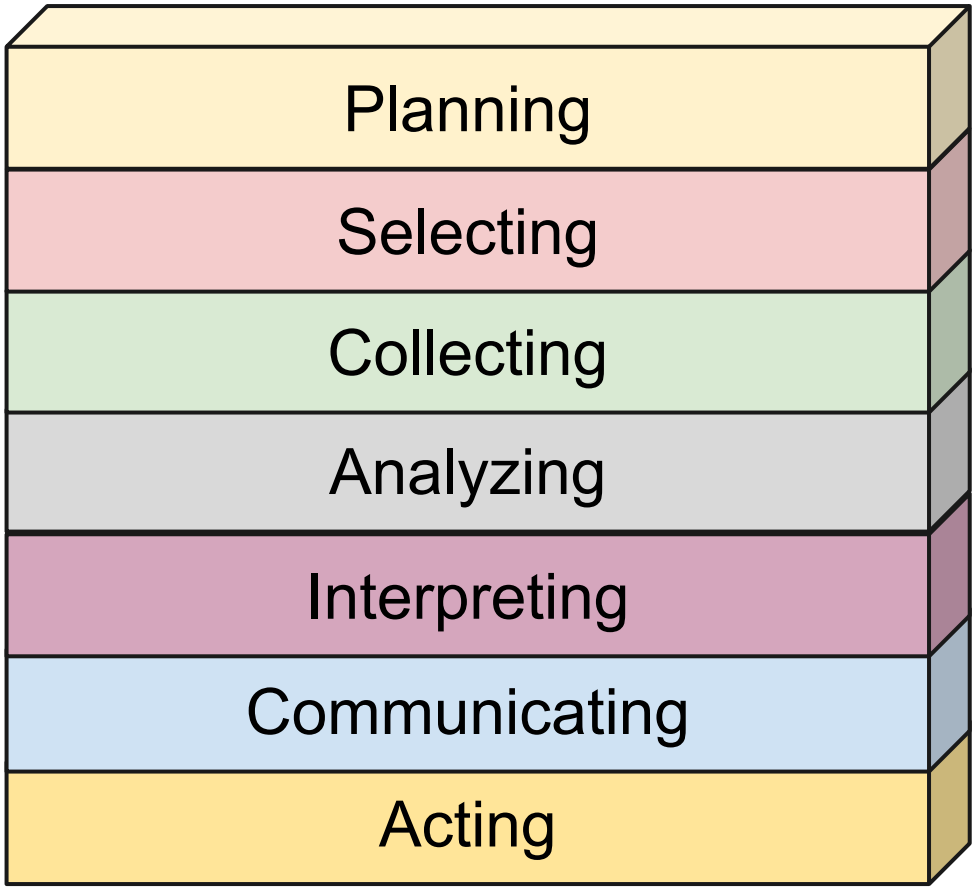
Turn and Talk.

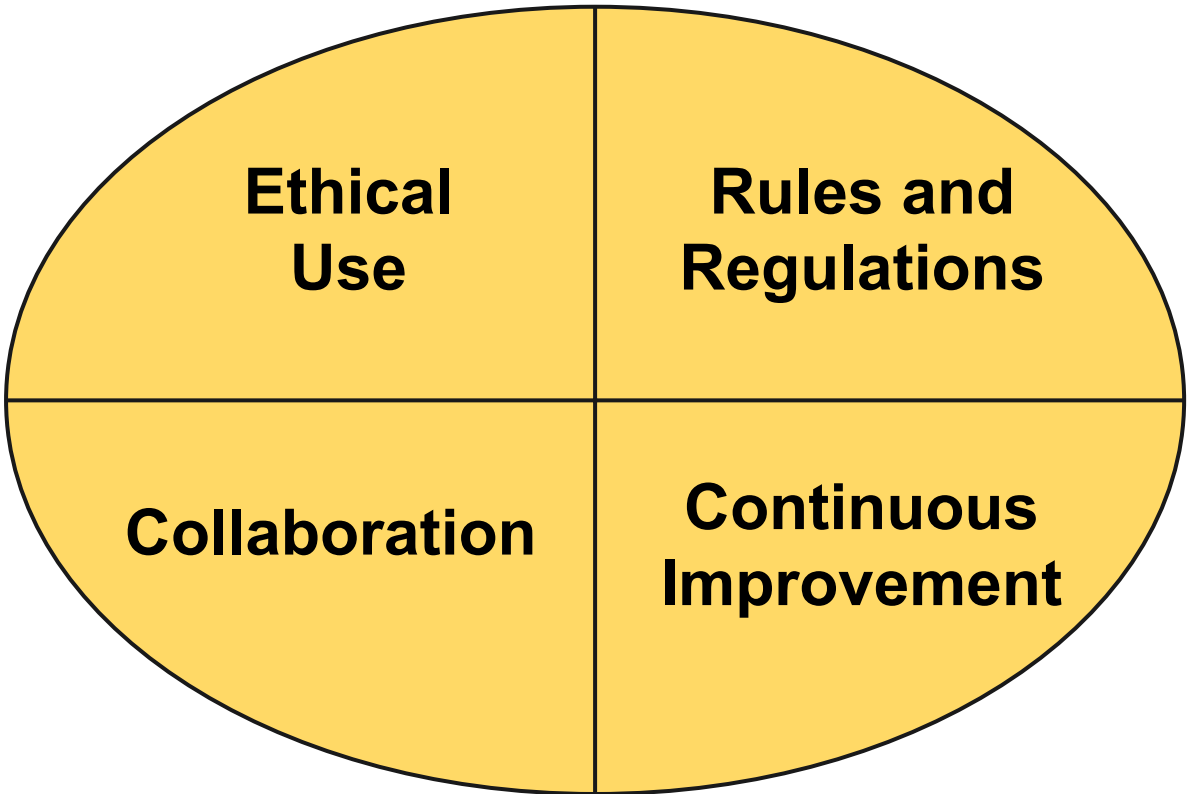
At first look, how would you rate your level of skills with data?



Data Standards:

Professional Behaviors

Habits of professional action based on values and beliefs that underlie an educator's practice as it relates to data use.

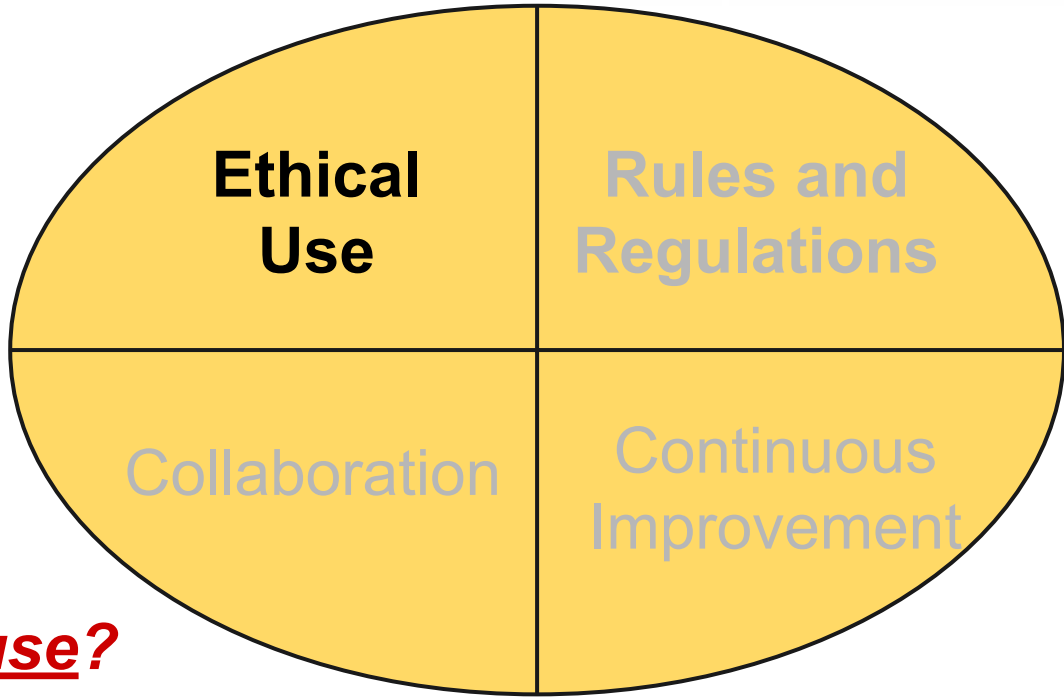


Data Standards:

Professional Behaviors, continued

Ethical Use: Commits to the proper use of data.

- Data Quality
- Transparency
- Representation
- Ethics
- Culture
- Use



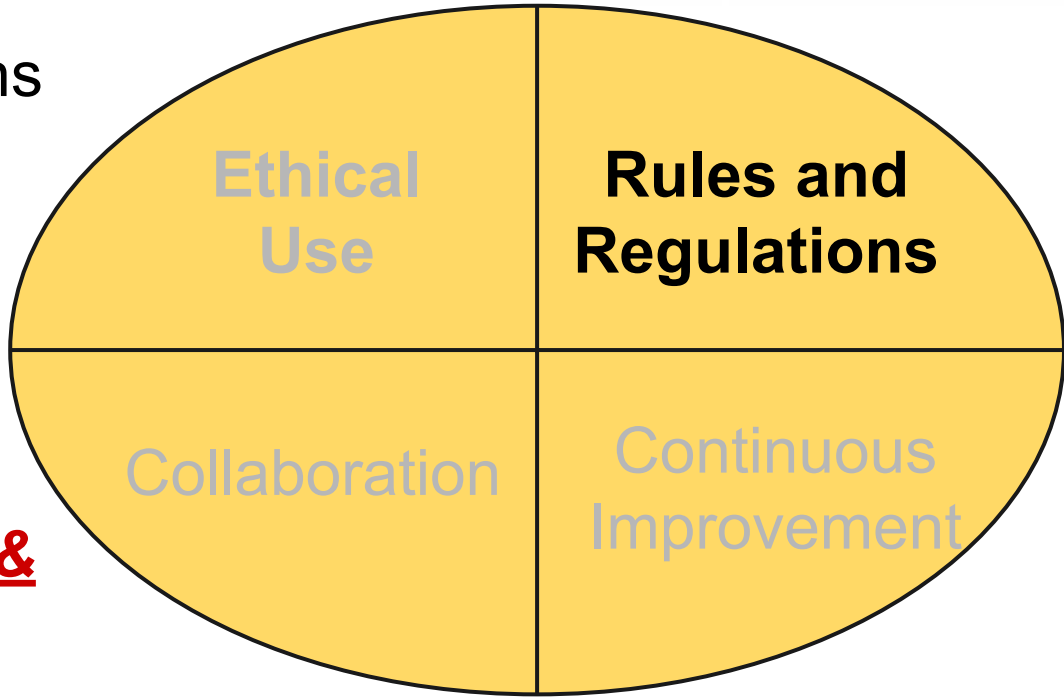
How would you rate your team's individual and collective professional behaviors in ethical data use?

Data Standards:

Professional Behaviors, continued

Rules & Regulations: Acts in accordance with the legal, social and economic standards involved in the use of data.

- Rules and Laws
- Protection
- Advocacy for Protections



How would you rate your team's individual and collective professional behaviors with data rules & regulations?

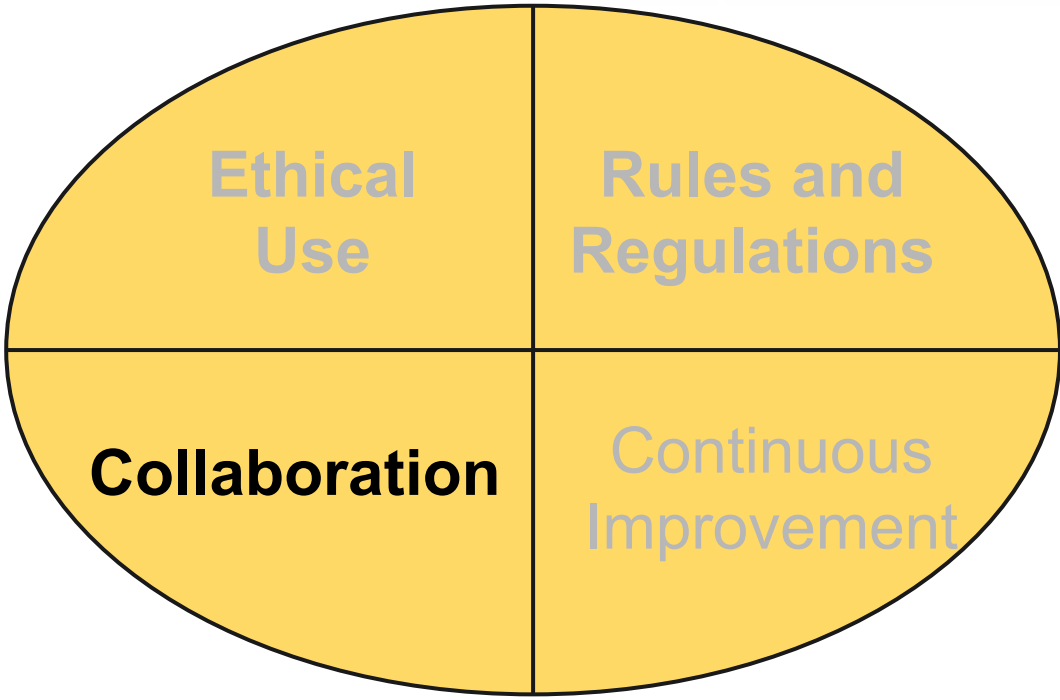
Data Standards:

Professional Behaviors, continued

Collaboration: Facilitates a collective effort to use and share data.

- Collaborative Use
- Collaborative Climate
- Outreach
- Prioritization

How would you rate your team's individual and collective professional behaviors in collaboration with data?

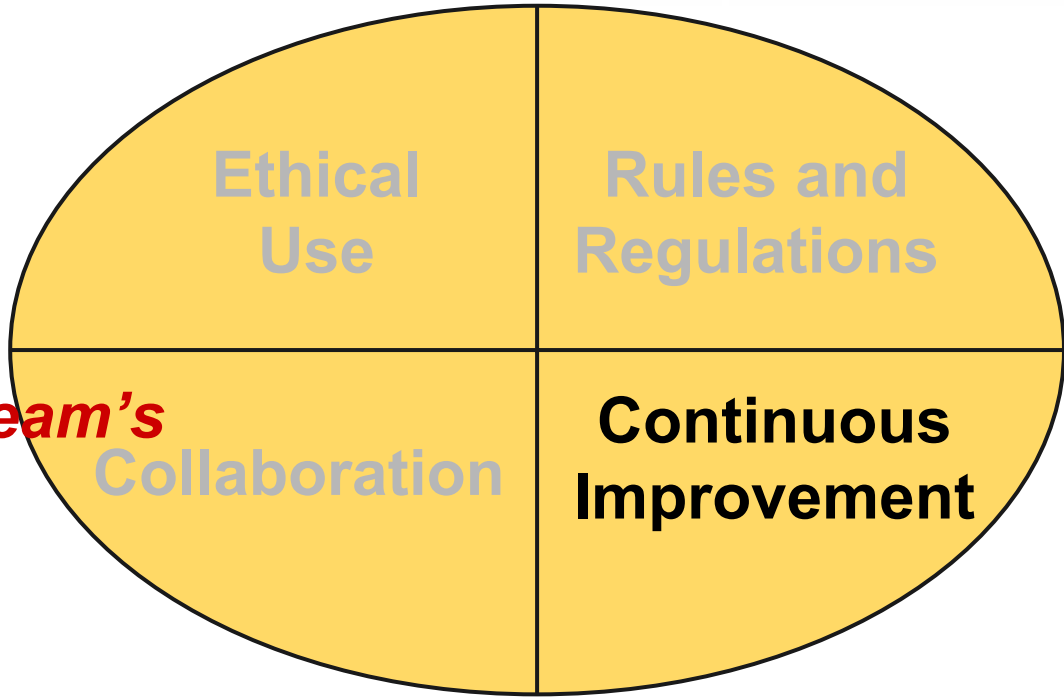


Data Standards:

Professional Behaviors, continued

Continuous Improvement: Embraces the challenge of evidence-based, continuous improvement and change through the use of data.

- Problem Solving
- Improving Outcomes
- Professional Development



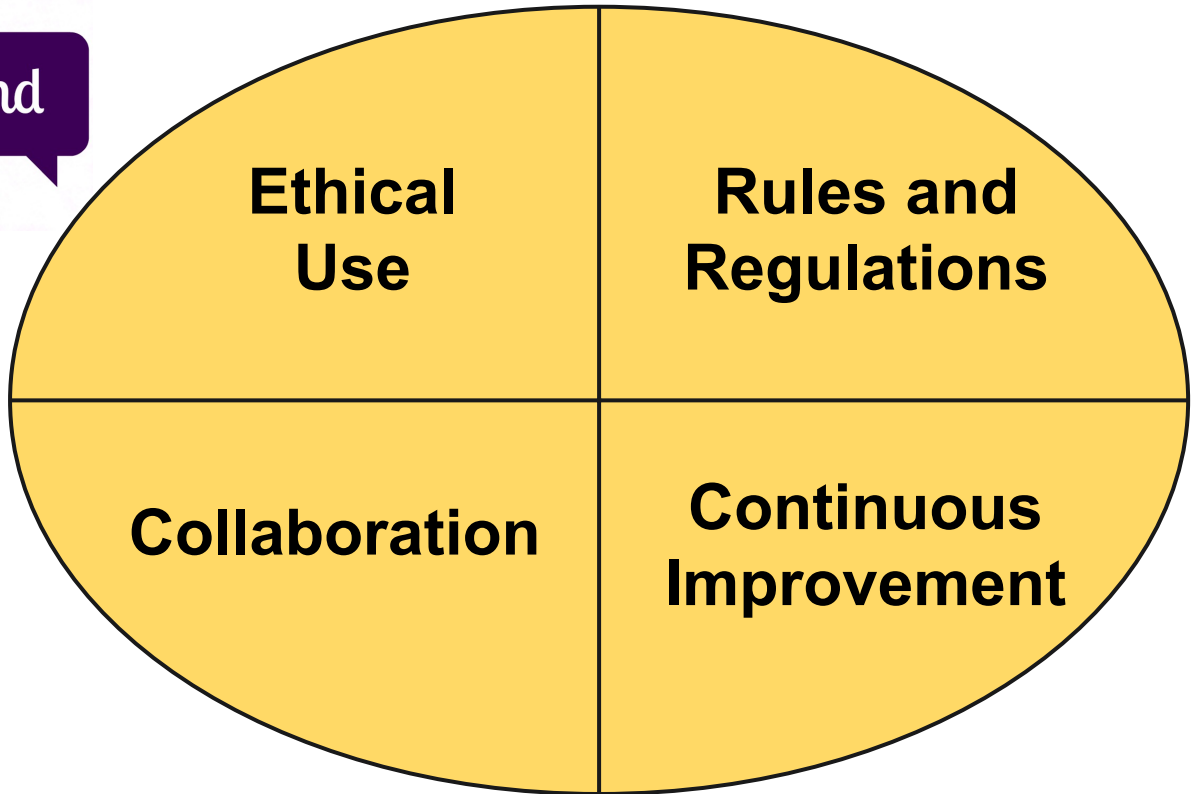
How would you rate your team's individual and collective professional behaviors in continous improvement?

Data Standards:

Professional Behaviors

Turn and Talk.

At first look, how would you rate your level of professional behaviors with data?



Team Reflection and Discussion

Team Time

Discuss -- As a leadership team, how might you use these data use standards moving forward?

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Data Navigation and Inquiry

Data Sources

Role of Data

- What is that we want students to know and do?
- **How will we know if they've learned it?**
- What will we do if they don't?

Which data serves our purpose to answer this question?

- **classroom assessment data?**
- **periodic test data?**
- **state test data?**

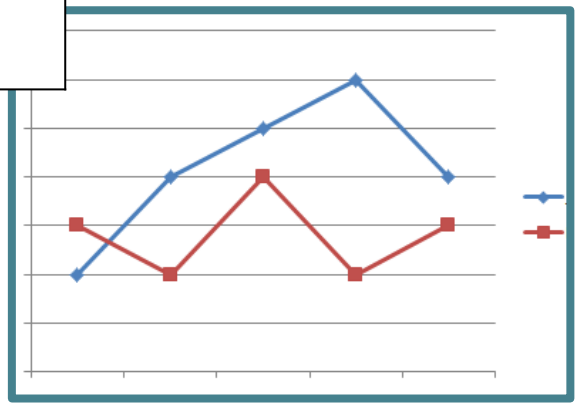
Data Sources for the Leadership Team

Summative Annual Assessment Data	• Reports year-to-year progress of all students • Reports strengths and weaknesses in knowledge, skills and understandings • Reports critical gaps annually
Periodic/Interim Assessment Data	• Reports within-year progress of all students • Reports strengths and weaknesses in knowledge, skills and understandings • Reports critical gaps during the school year
Ongoing Classroom Assessment Data	• Reports individual progress thoughout the school year • Reports strengths and weaknesses in knowledge, skills and understandings • Reports critical gaps continually

Data Sources for the Leadership Team

Summative Annual Assessment Data	• Reports year-to-year progress of all students • Reports strengths and weaknesses in knowledge, skills and understandings • Reports critical gaps annually
Periodic/Interim Assessment Data	• Reports within-year progress of all students • Reports strengths and weaknesses in knowledge, skills and understandings • Reports critical gaps during the school year
Ongoing Classroom Assessment Data	• Reports individual progress thoughout the school year • Reports strengths and weaknesses in knowledge, skills and understandings • Reports critical gaps continually

Which achievement data does your leadership team use the most? Why?



Importance of Summative Data

Summative Annual Assessment Data	• Reports year-to-year progress of all students • Reports strengths and weaknesses in knowledge, skills and understandings • Reports critical gaps annually

State Summative Data …

Reports to the Public

Used for Accountability

Reveals Trends and Patterns

Each Leadership Team Member should know the data reported about their school … well enough to explain it to others!

Importance of Summative Data

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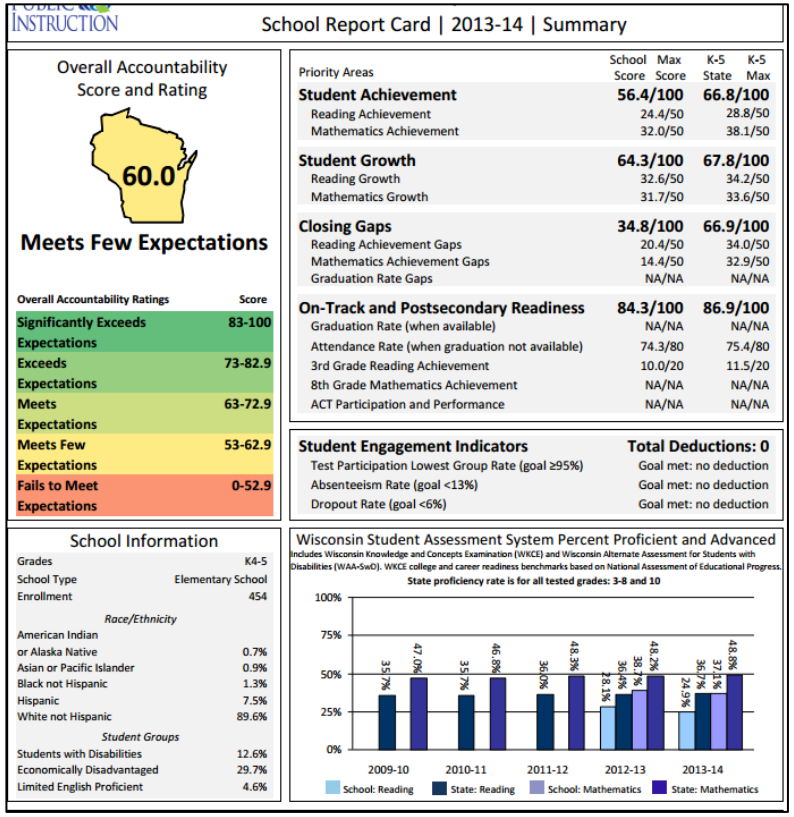
State Summative Data … Two Primary Reports:

School Report Cards



INSTRUCTION

School Report Card | 2013-14 | Summary

Overall Accountability Score and Rating

60.0

Meets Few Expectations

Overall Accountability Ratings	Score
Significantly Exceeds Expectations	83-100
Exceeds Expectations	73-82.9
Meets Expectations	63-72.9
Meets Few Expectations	53-62.9
Fails to Meet Expectations	0-52.9

Priority Areas	School Score	Max Score	K-5 State	K-5 Max
Student Achievement	**56.4/100**		**66.8/100**	
Reading Achievement	24.4/50		28.8/50	
Mathematics Achievement	32.0/50		38.1/50	
Student Growth	**64.3/100**		**67.8/100**	
Reading Growth	32.6/50		34.2/50	
Mathematics Growth	31.7/50		33.6/50	
Closing Gaps	**34.8/100**		**66.9/100**	
Reading Achievement Gaps	20.4/50		34.0/50	
Mathematics Achievement Gaps	14.4/50		32.9/50	
Graduation Rate Gaps	NA/NA		NA/NA	
On-Track and Postsecondary Readiness	**84.3/100**		**86.9/100**	
Graduation Rate (when available)	NA/NA		NA/NA	
Attendance Rate (when graduation not available)	74.3/80		75.4/80	
3rd Grade Reading Achievement	10.0/20		11.5/20	
8th Grade Mathematics Achievement	NA/NA		NA/NA	
ACT Participation and Performance	NA/NA		NA/NA	

Student Engagement Indicators	Total Deductions: 0
Test Participation Lowest Group Rate (goal ≥95%)	Goal met: no deduction
Absenteeism Rate (goal <13%)	Goal met: no deduction
Dropout Rate (goal <6%)	Goal met: no deduction

School Information

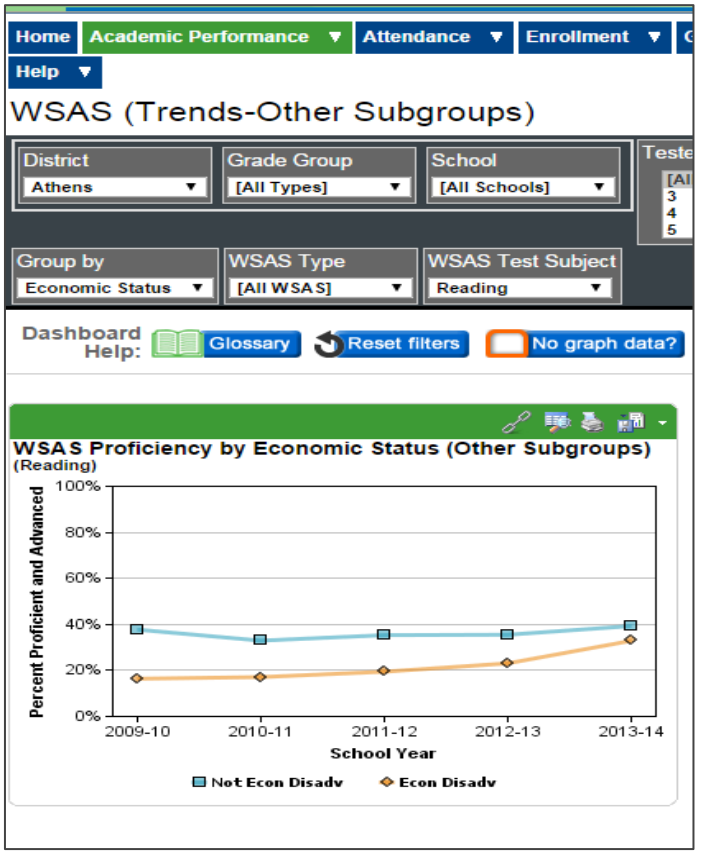
Grades	K4-5
School Type	Elementary School
Enrollment	454
Race/Ethnicity	
American Indian or Alaska Native	0.7%
Asian or Pacific Islander	0.9%
Black not Hispanic	1.3%
Hispanic	7.5%
White not Hispanic	89.6%
Student Groups	
Students with Disabilities	12.6%
Economically Disadvantaged	29.7%
Limited English Proficient	4.6%

Wisconsin Student Assessment System Percent Proficient and Advanced

Includes Wisconsin Knowledge and Concepts Examination (WKCE) and Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD). WKCE college and career readiness benchmarks based on National Assessment of Educational Progress.

State proficiency rate is for all tested grades: 3-8 and 10

WISEdash Public



Home | Academic Performance | Attendance | Enrollment | Help

WSAS (Trends-Other Subgroups)

District	Grade Group	School
Athens	[All Types]	[All Schools]

Group by	WSAS Type	WSAS Test Subject
Economic Status	[All WSAS]	Reading

Dashboard Help: Glossary | Reset filters | No graph data?

WSAS Proficiency by Economic Status (Other Subgroups)
(Reading)

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Data Inquiry Process

Purposeful Data Work

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Data Navigation and Inquiry

Data Navigation: Accessing the data

Data Exploration: Looking through the data to see what's there; semi-systematic searching without a specific question

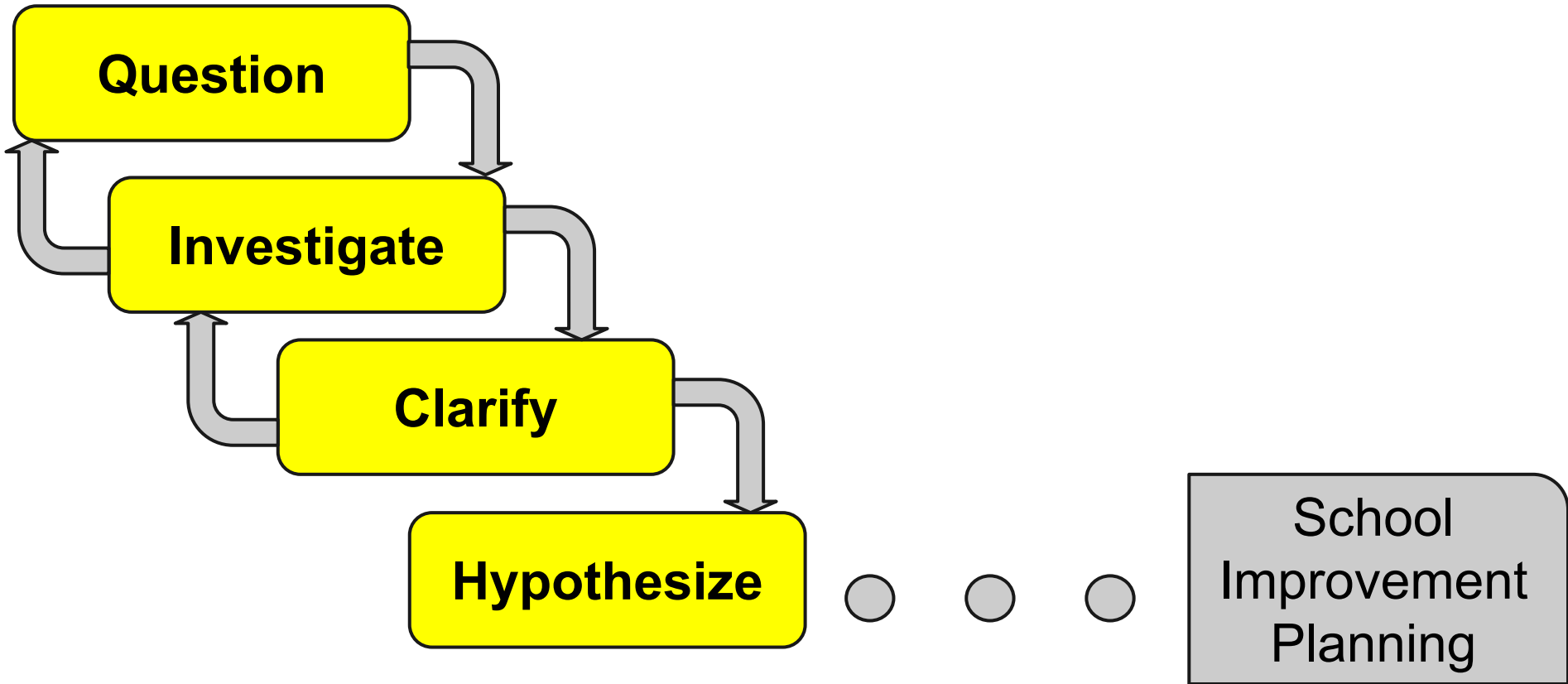
Data Investigation: Purposeful study of data to answer a specific data question

Data Interpretation: Assigning meaning to data findings and determining significance or criticality and clarifying findings

Data Inquiry: The process of posing a critical data question, investigating the data, interpreting and clarifying findings and inferring possible root causes in practice to inform ***School Improvement Plan*** actions.

Data Inquiry Process

Data Inquiry: The process of posing a critical data question, investigating the data, interpreting and clarifying findings and inferring possible root causes in practice to inform ***School Improvement Plan*** actions.



DATA INQUIRY PROCESS:

Question

- Meaningful Data Inquiry begins with an important data question.
- Use the School Report Card or WISEdash Public to determine important data questions to ask.

Priority Areas	School Score	Max Score	K-5 State	K-5 Max
Student Achievement	**72.4/100**		**66.8/100**	
Reading Achievement	31.7/50		28.8/50	
Mathematics Achievement	40.8/50		38.1/50	

Sample Data Questions from the Report Card:

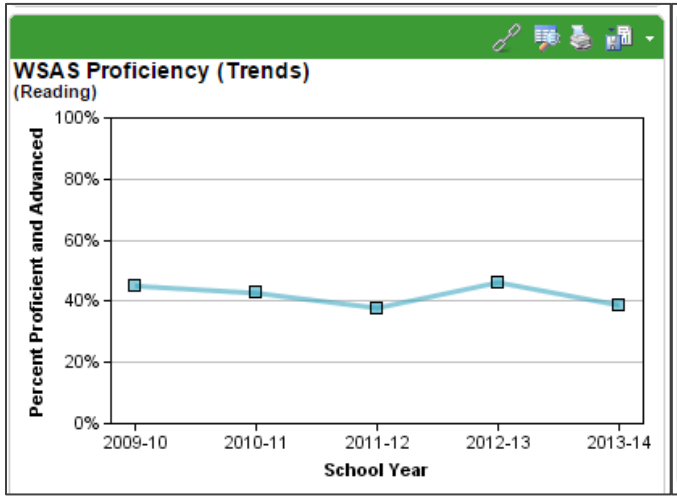
- *What are the 5-year trends of reading achievement in grades 3, 4, and 5?*
- *What are the reading gap trends for economically disadvantaged students?*

DATA INQUIRY PROCESS:

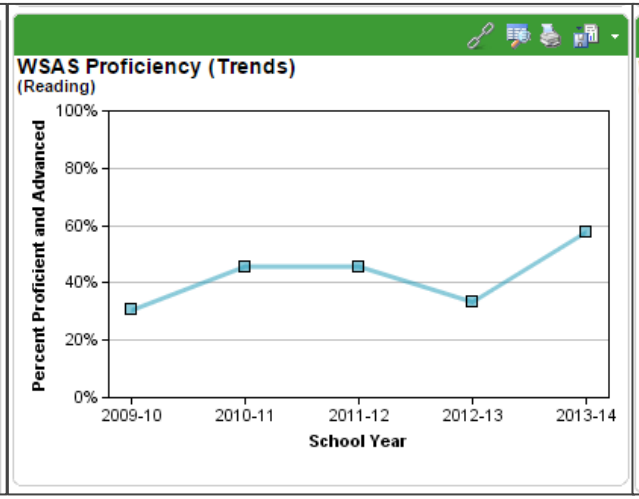
Investigate

Using data tools, investigate the data to find data “pictures” that answer the question.

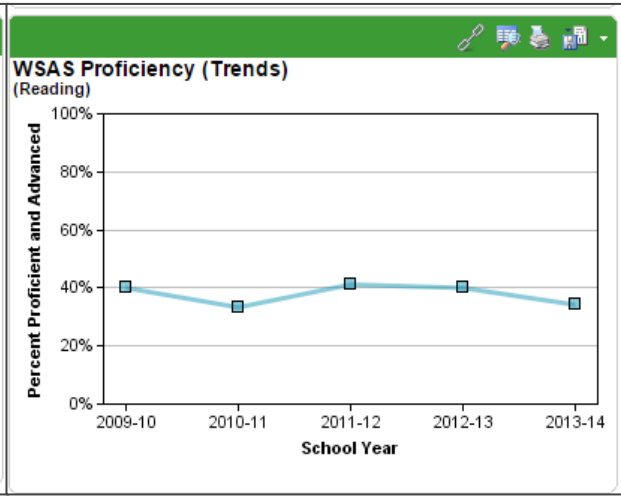
What are the 5-year trends of reading achievement in grades 3, 4, and 5?



Grade 3



Grade 4



Grade 5

Based on these three pictures of 5-year trends for each grade, what are the data findings?

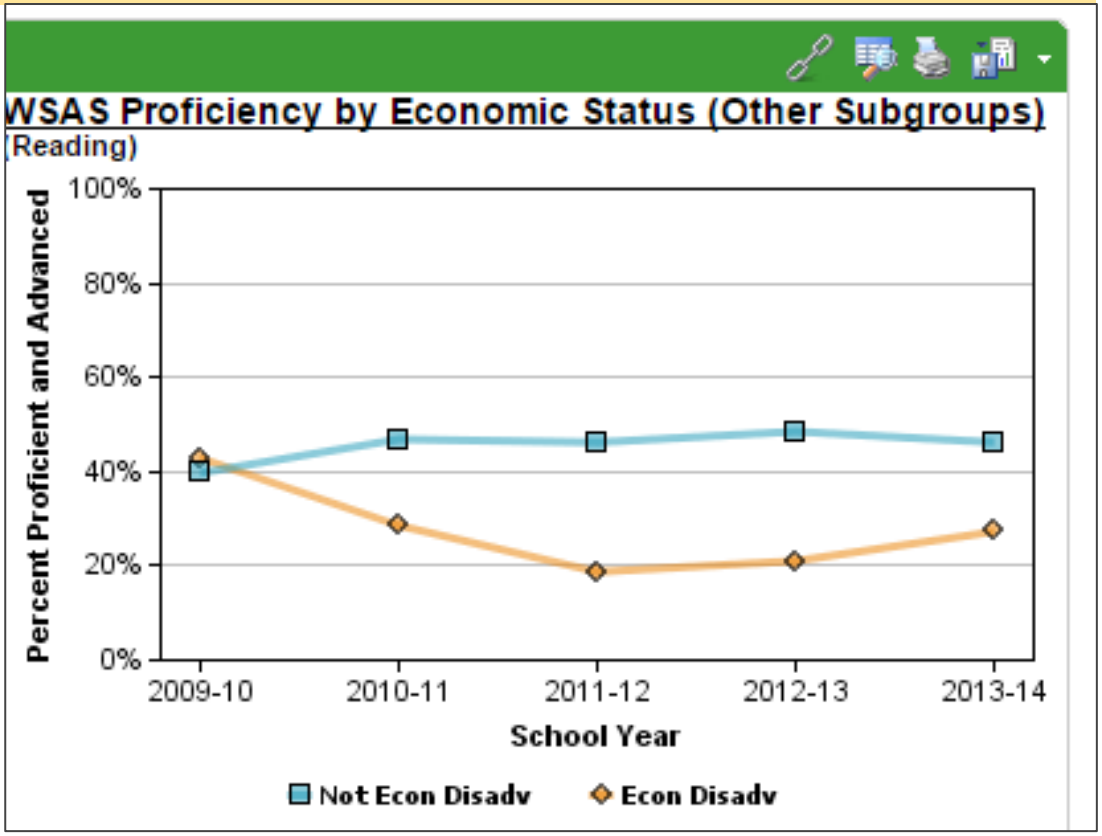
DATA INQUIRY PROCESS:

Investigate, continued

Using data tools, investigate the data to find data “pictures” that answer the question.

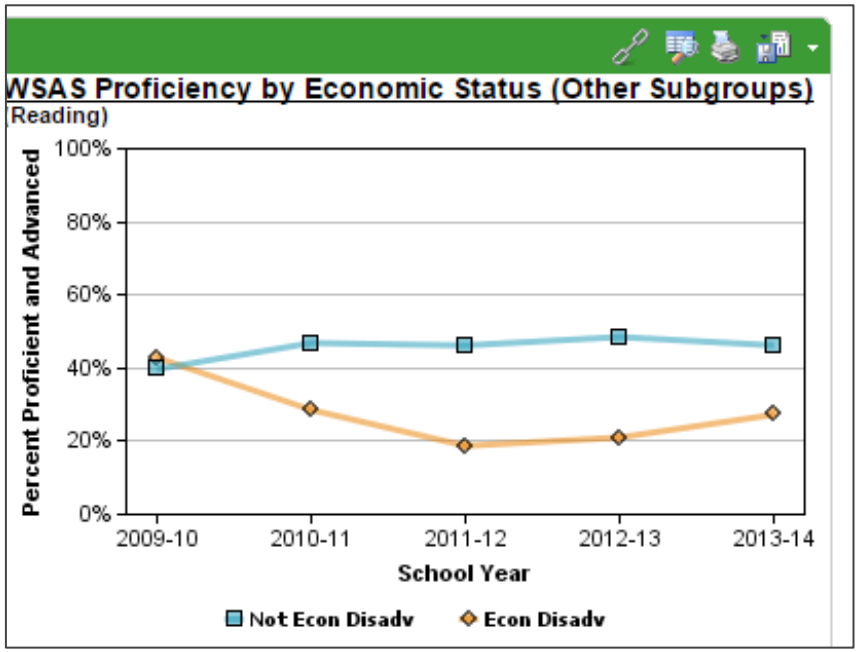
What are the reading gap trends for economically disadvantaged students?

Based on this gap picture comparing EcD and Non-EcD in reading for grades 3-5, what are the data findings?



DATA INQUIRY PROCESS:
Clarify

- When we have data pictures, it's important to document our findings.
- Data findings are clear statements of the data patterns and trends, and should be interpreted in terms of their "criticality".



Data Finding:

- Whereas there was no gap between EcD and Non-EcD students in 2009-10, the gap widened over the next four years, with the EcD group improving in 2014-15, while the non-EcD achievement remained relatively flat.
- **Interpretation:** Since the gap was increasing and persistent over four years, the EcD gap is critical and in need of improvement.

DATA INQUIRY PROCESS:

Hypothesize

- Explanations for data trends are often “brainstorming” thoughts by team members

- To steer meaningful hypotheses, follow these protocols:
  a. Accept only **Hypotheses of Practice** -- that is, explanations about what we are doing or not doing that might be contributing to the data problem.
  b. Use a f**ramework of best practices** to steer the hypotheses. For example …
     - Educator Effectiveness Framework for Teachers and Principals
     - Literacy Framework components
     - Strategies for poverty gap closure framework

DATA INQUIRY PROCESS:

Hypothesize, continued

For example:

a. ***We think we have this gap because …***

- we only use verbal directions and paper when reading, instead of differentiating with brain-based strategies (Danielson Domain 3c)
- we are using literary text (stories) and very little informational text to build text complexity (CCSS and Smarter Balanced Blueprints)
- we do not set or post our learning purpose, thus students are not aware and do not take ownership (Domain 1c)
- We do not have enough time to collaborate about how students are doing (Principal Framework 1.2.3)

DATA INQUIRY PROCESS:

Hypothesize, continued

Hypotheses of Practice Lead to School Improvement Plan Actions

a. **We will** … use differentiated brain-based strategies when teaching reading (Danielson Domain 3c)

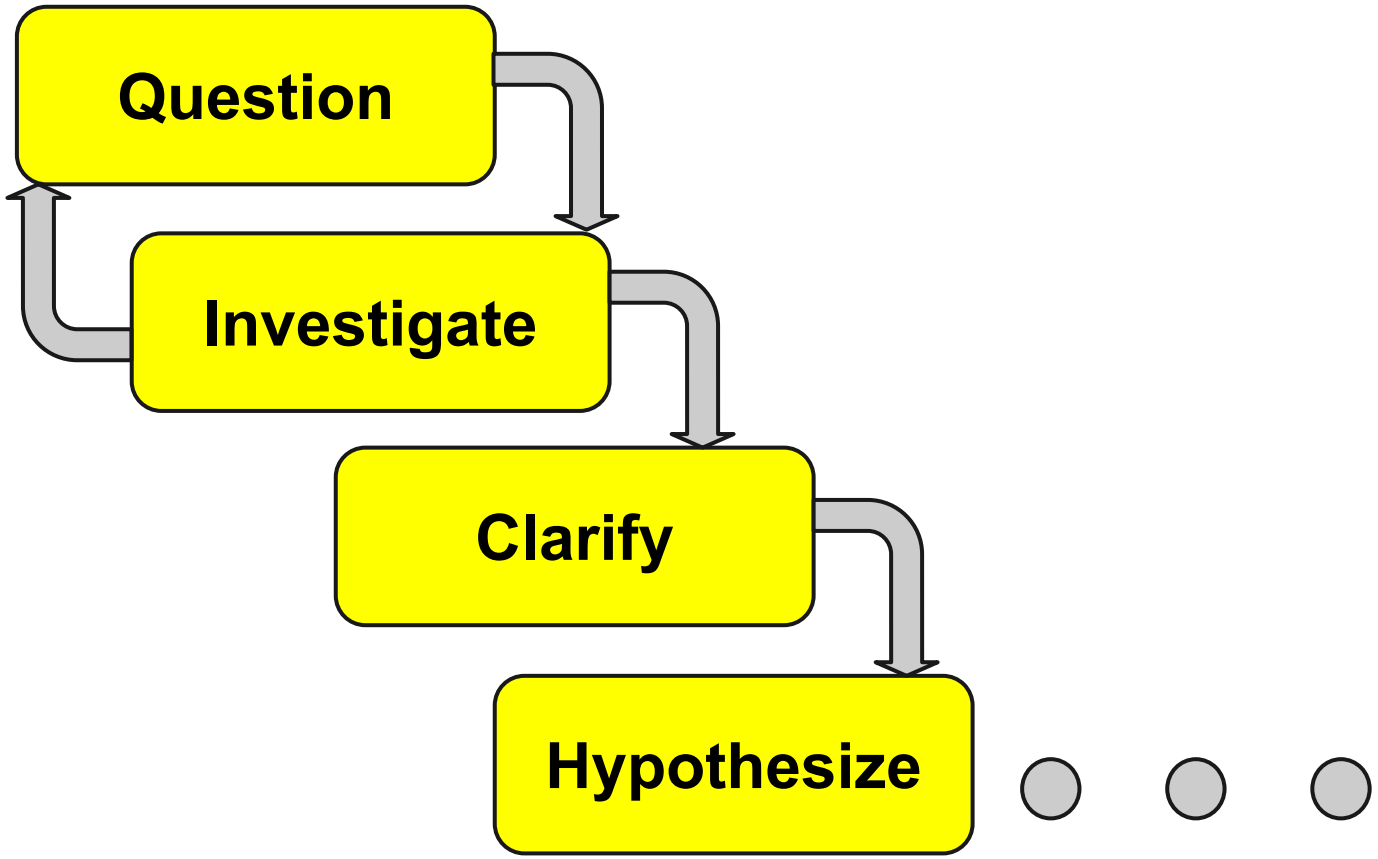
b. **We will** … increase the amount of informational text students are reading to build text complexity (CCSS and Smarter Balanced Blueprints)

c. **We will** … set and post our learning purpose in the classroom daily (Domain 1c)

d. **We will** … take a close look at our collaboration time and plan for adjustments before the next semester (Principal Framework 1.2.3)

This has been a Quick View of the

Data Inquiry Process



School Improvement Planning

Closing

Thank You!

Team Time-What's your level of commitment to use your learning?

1. How can you use the Data Standards with your team?

2. How will you use the Data Inquiry Process?